

# Tracing the Chain: An In-Depth Look at the University of Montana's Farm to College Program

Executive Summary

March 2007

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## Introduction

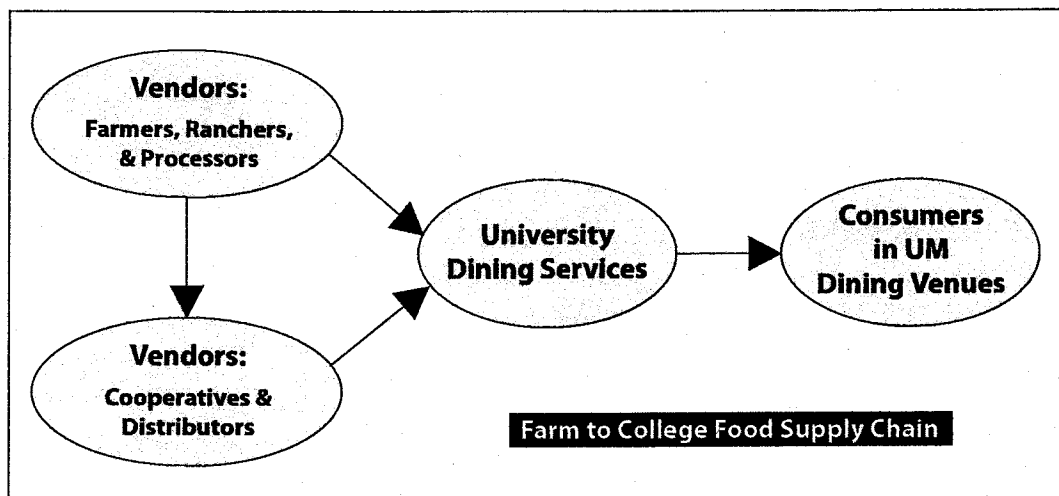
On a crisp, clear afternoon in March 2006, a group of researchers from the University of Montana pulled our van into the lot of Montola's oilseed crushing plant in tiny Culbertson, some 650 miles away from Missoula.<sup>1</sup> We had crossed the state to learn about Montola, which produces all the cooking and salad dressing oils used in our university's dining halls. Despite the physical distance between Missoula and Culbertson, we were there to learn about the social and economic connection between the two places, a bond forged by the University of Montana's Farm to College Program. And learn we did. Our trip was part of a larger study we conducted to find out about the program's impacts on the state and to explore ways to strengthen Farm to College.<sup>2</sup>

The University Dining Services initiated Farm to College in the spring of 2003, with the help of four graduate students from the Environmental Studies Program. Although the idea was new to Montana at the time, such "farm to cafeteria" programs have surfaced nationwide during the last decade, serving local and/or regional ingredients in schools and on college campuses

and educating students about food and farming. At least 200 colleges<sup>3</sup> and an estimated 950 schools<sup>4</sup> (K-12) in more than 35 states are now part of a dynamic movement that aims to support local economies, improve food quality, and reduce the amount of fuel used to transport food, among other objectives.

At the UM, Dining Services' mission for the program is to "support agricultural economic development through the purchase of local and regional food."<sup>5</sup> Dining Services defines "local" as food products from the state of Montana, while "regional" is defined as foods from nearby states.<sup>6</sup> Farm to College products are those that: (1) are grown, processed, value-added or manufactured; and (2) originate in the program's defined geographic area; and (3) contain local and/or regional products when seasonally available. Foods considered unique to the region may also be considered Farm to College products.

The UM program has grown rapidly. In fiscal year 2005, Dining Services purchased about \$403,000 worth of Farm to College products, approximately 13% of its \$3.1 million food budget.<sup>7</sup> Of the Farm to College purchases,



82% were from Montana's farmers, ranchers, and food-related businesses.

Since the program's inception, the University has gotten a lot of positive publicity because of Farm to College, but the research team wanted to dig a little deeper and learn more about what's really involved. We wanted to trace the food supply chain associated with the program, and identify some of its social, economic, and transportation-related benefits and challenges. In other words, we were interested in what the program means to vendors who sell into it, to the staff who run the Dining Services, and to the consumers who get a taste of Montana. We also looked at the transportation-related impacts of the program, and how local foods reduce fuel use and pollution. The final goal of our research was to make recommendations for improving Farm to College and for broader policy change. What follows is a summary of the major findings and recommendations emerging from the study.

## Findings

### Dining Services Goes Local

Buying and handling local and regional products has created new opportunities and challenges, according to the nine members of University Dining Services' staff interviewed for this study. As repeatedly became clear to us, the commitment of Dining Services has been a key to the program's accomplishments. As one staff person put it: "We went into this going, 'we're going to do this and make sure it's successful and works.'"

Dining Services' employees support Farm to College for two primary reasons. First, the valuable links it has created with rural Montana have led to "positive public relations" for the UM. According to one employee, Farm to College demonstrates that: "We do in a direct, absolute way have something to do with rural Montana." Staff members stress the value of supporting local farmers and ranchers and keeping dollars circulating in the state's economy. And, on a personal level, many report that they "feel good" about what they are doing and that they enjoy the personal relationships formed with vendors. Second, nearly every employee we spoke with feels that local food is often higher in quality, fresher, and more nutritious for students.

Sourcing food locally often represents a departure from Dining Services' typical methods of ordering from SYSCO, the world's largest food

services distributor. SYSCO has a prime vendor contract to provide about 90% of what the University needs. Although SYSCO does carry some Farm to College products, Dining Services also works with many other local vendors to meet the aims of the program. According to the Dining Services' staff, they face four major challenges:

- Many local vendors cannot deliver as frequently as the institution needs.
- The large quantity of products necessary is not always available locally.
- Institutional food services have grown accustomed to using prepared foods (e.g., washed, chopped lettuce, not heads of lettuce). Those value-added products are often not available from local sources.
- Some vendors seem unwilling to learn the process of how to effectively work with an institutional market. When the vendors and Dining Services have sought to learn from one another about their needs, that has proved to be mutually beneficial and led to successful partnerships.

Making Farm to College work has been a learning experience for many of those involved. Dining Services' employees have tried to maintain a positive attitude towards the challenges that do arise and to create solutions, like planning menus around local food availability and doing some processing in-house. They have also partnered with a few vendors—such as the Western Montana Growers Cooperative—to develop the capacity to process raw products.

Dining Services would like to see Farm to College continue to grow. Right now, however, Montana's food supply chain often lacks the capacity to meet that goal. A major finding of this study is that more value-added processing in the state could greatly expand the ability of our food-related businesses to serve the needs of public institutions and extend the availability of local products throughout the year.

### Eating and Learning: Consumers' Views

Dining Services' website describes student demand for higher quality food and a desire to know where their food comes from as major reasons for launching Farm to College. Also, as noted below, many of the vendors who sell

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into the program see it as an opportunity to expose students to the quality of their products. Yet, before our research began there was little assessment of student demand for and knowledge of local food at the UM. That's why we sought to learn through a "dot survey"<sup>8</sup> about what consumers—particularly those on meal plans who eat regularly in the main dining hall—think about Farm to College.

The vast majority of the 380 students surveyed value Farm to College, with 84% reporting it is very or somewhat important to them as consumers in the dining halls. The most frequently mentioned reasons are that they like supporting Montana's farmers and ranchers (42%) and keeping more money in Montana's communities (21%), along with other benefits (see pie chart).

Despite the aims of Dining Services and the vendors, the survey revealed that there is a lack of information about the program among student consumers. Specifically, here's what they want to know about:

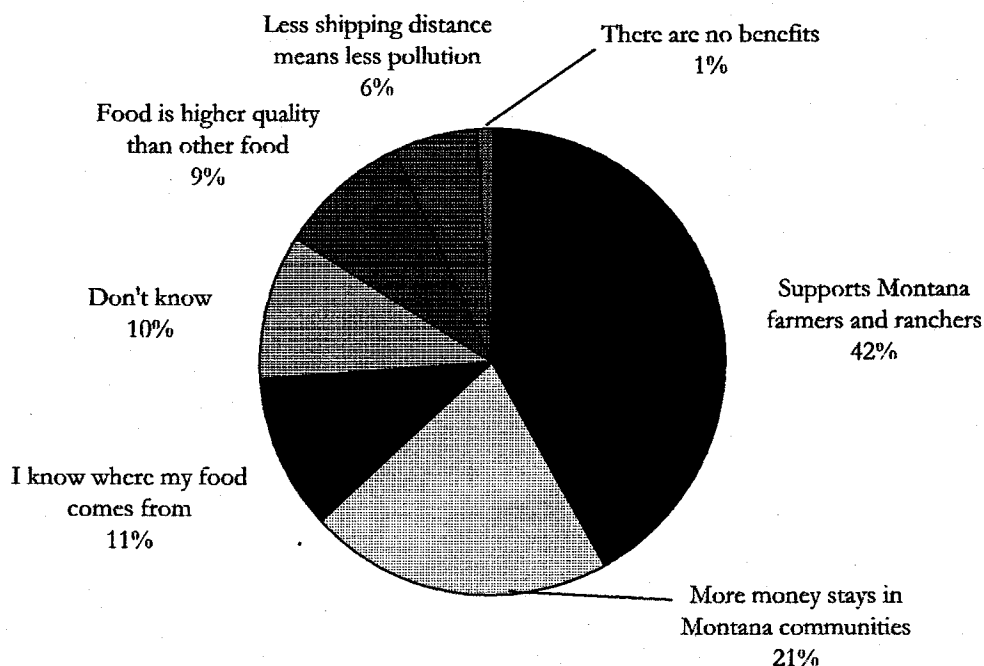
- Whether there are economic benefits for Montana communities: 28%
- How the food is grown or processed: 23%
- Whether the food is healthier: 21%
- Who the producers are: 11%
- Whether there are environmental benefits: 11%
- Nothing: 6%

While our survey showed strong support for Farm to College among student consumers, there is clearly a need to increase the educational component of the program by targeting the priorities they identified. Education and marketing can increase demand for local food and help young consumers cultivate understanding of the food that sustains them.

## Vendors' Experiences: Reaping Benefits

According to Dining Services and many consumers on campus, Farm to College presents

**Students' Perceptions of the Most Important Benefit of Farm to College (N=383)**



an important opportunity to support rural Montana and its food and farm-related businesses. What do the Montana-based vendors—that is, those who sell into the program—think about it? A major portion of this research focused on answering that question and on learning from them about their businesses, their relationship with the UM, and more.

A variety of types of vendors sold products through Farm to College during fiscal year 2005, the year we focused on for this study. For example, a few agricultural producers sold individually and directly to the UM (e.g., Terrapin Farms, Wee Sprouts). Other farmers and ranchers pooled products for delivery and sale. Some vendors sold prepared foods directly, such as salad dressings from Viki's Montana Classics in Bigfork, granola from Churn Creek in Sidney, and salsa from Brentari Foods in Missoula. Other foods came through a distributor, such as Pasta Montana products through Bakery and Restaurant Foods and Wheat Montana products carried by SYSCO. Distributors are also considered vendors. Thus, despite the program's name, only a fairly small portion of the vendors are actually farms and often only indirectly.

Based on Dining Services' data, we identified 45 vendors who sold Farm to College products in FY 2005.<sup>9</sup> Of these vendors, the dollar

**E**ighty-four percent of the students surveyed say Farm to College is important to them as consumers.



**I** like the fact that the students are eating a good product up there, and that the University cares about it. Plus, it's helping local business. I employ seven people, so it's kind of a snowball effect when a University of that size takes on a product." —Jonathan Whiting, Mexitana



amounts of sales per vendor ranged from \$24 to over \$148,000. Just nine of the 45 vendors accounted for over 90% of the Farm to College purchases that year. Overall, 31 vendors from FY 2005 participated in either a phone survey (n=23) or in-depth interview (n=8).<sup>10</sup>

The relationship between vendors and Dining Services has been fairly strong, according to our phone survey. For the 23 survey respondents, Farm to College is "very important" (61%) or "somewhat important" (17%) to their business. Over 60% of the survey respondents learned about Farm to College from Dining Services, which illustrates the institution's commitment to developing the program. Also, 52% of the survey respondents felt that Dining Services had sought to meet their needs as a business, 26% said the institution had not done so, and 22% did not know. Vendors identified a number of benefits of the program (see side bar for the most frequently mentioned).

#### **Vendors' Perspectives on the Top Benefits of Farm to College**

- The positive image for the company and consumers' exposure to their products.
- Increased sales.
- Personal benefits, such as pride in selling to the UM.

The eight in-depth interviews with Farm to College vendors provide further insight as to how some businesses have worked with an institutional market, as well as how the UM has affected each company. In general, many of these businesses agreed on a few common benefits of working with the UM. Many more impacts of Farm to College, however, came to the surface through the interviews. Highlights are presented below; see the full report for a rich description of each case.

**Bausch Potato** grows and processes spuds in Whitehall and ships fresh-cut fries and hash browns to the UM.<sup>11</sup> Bausch exemplifies how processing helps the business meet the University's need for convenience, while reaping the profits of the value-added sector. Before the launch of Farm to College, however, Bausch was not able to get their potatoes in the door at the UM. Owner, Mark Bausch is clear, however, that Farm to College is no subsidy system. He asserts that when it comes to his potatoes, Dining Services actually saves money.

**Meadow Gold**, on the other hand, had been selling to the UM long before 2003. This dairy illustrates how a corporate giant—Dean Foods—can supply an institution with large quantities of locally-produced food. The milk, sour cream, and cottage cheese are all processed in Kalispell, where the company gets most of its milk from dairy farms in the Flathead Valley, as well as several Hutterite colonies. Interestingly, even though Meadow Gold sold more than any other business to the UM as part of Farm to College, the creation of the program itself has been of minimal consequence for the dairy (although they stress that the UM's business is significant and important to them).

Unlike Meadow Gold, **Mexitana** is a relative newcomer to the food scene in Montana. They make their tortillas just 45 miles south of the UM in Corvallis. Only 30% of the flour in a Mexitana tortilla, however, is grown on a Montana farm. As the owner explains, "The wheat is actually too good here.... It just doesn't spread out very well." For some small businesses, meeting the UM's required volume can be a challenge. Mexitana, however, gladly embraces the University, as 8% of the tortilla company's annual sales are through Farm to College.

For years, **Montana Natural Beef** filled a gaping hole in western Montana's agricultural infrastructure by finishing and processing beef.<sup>12</sup> After spending most of their lives grazing on eight Mission Valley ranches, the cattle made their way to Dixon for finishing, to Ronan for slaughter, to Missoula for processing, and finally to the UM, offering the eater a true happy meal. Montana Natural Beef's manager, Will Tusick, appreciates Farm to College and the partnership that formed as a result: "I'd like to see that Farm to College Program keep going. I think it's a whole process of cooperation and finding common ground for the good of all instead of someone getting an inferior product and somebody making a lot of money."

Another important Farm to College partner is **Montola**, which is now a division of Sustainable Systems LLC (a business relationship that actually has roots in Farm to College). In Culbertson, Montola presses safflower oil from seeds grown by some 300 farmers (mostly from Montana and the Dakotas). The company claims that the oil is a healthier product because of its high-oleic, monounsaturated fat levels. Dining Services has been buying Montola's oil since Farm to College's inception. As a result, SYSCO

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now delivers and sells the oil to the UM. Thus, direct feedback about the product, which has helped many Farm to College vendors adapt to an institutional market, is lost. Montola's General Manager, however, views this delivery system as vital; and now that SYSCO carries their product to other venues, sales are increasing.

With \$14 million worth of inventory turning over every 17 days, **SYSCO Montana** may seem like an improbable part of Farm to College. In FY 2005, however, they provided over \$100,000 worth of local and regional products, making it the second largest vendor in terms of sales that year. From their warehouse in Billings, SYSCO ships pallets of local, national and global products to the UM and across the region. In the CEO's words, "That's what we do: we move boxes." This illustrates a challenge for Montana companies that would like to sell to the UM: how do they get their product into an institution's doors in a way that is convenient and efficient? Accessing markets through SYSCO requires, at a minimum, that local producers and businesses maintain \$1 million worth of liability insurance, have enough volume to keep a warehouse stocked, and use hefty packaging. Still, SYSCO is willing to work with Montana producers and businesses; and according to Montana CEO, Pat Burton, "If it will sell and our customers want it, we'll inventory it."

If finding large enough volumes of produce and getting it delivered efficiently are common challenges for Dining Services as it works with local producers, the **Western Montana Growers Cooperative** offers a unique solution. In 2006, thirteen producers (many of whom grow organically) were members of the Co-op, which has been selling fruits, vegetables and herbs to the UM since 2003. The University can "access more product from one place than they could before that," as one grower explained, because the Co-op reduces the need for Dining Services to deal with many individual farms. And the Co-op has been trying to address the institution's demand for processed foods; for example, the Co-op began chopping romaine lettuce. Partnering with Dining Services has reduced some risk associated with new initiatives to add value to the Co-op's products. While Farm to College has had a positive economic impact on the Co-op, its representatives stress how much they have learned from working with the UM about how to sell to an institution and appreciate that the Dining Services' staff seems to have a "genuine interest" in seeing the business succeed.

**Wheat Montana** of Three Forks is a farm, bakery and deli. The father-and-son operation decided to leave commodity markets, and began to focus on specialty flour made from hard wheat varieties which they test and claim are "chemical-free." All of the wheat and honey in their bread is produced in Montana. Other elements—like dextrose—are difficult to source locally. Wheat Montana's bread arrives fresh to stores but frozen to institutions because it gives food services more control over inventory. Wheat Montana began selling to the UM as soon as Farm to College got started. Since then, the company has signed a contract to provide most of the UM's bread products, the majority of which are carried by SYSCO.

## Vendors' Experiences: Facing the Challenges

Despite the successes with Farm to College, vendors in both the phone survey and the interviews identified a number of challenges that they face (which were similar to those expressed by Dining Services' staff). In general, however, the vendors did not have many complaints, which may reflect the fact that they have already figured out how to make this market work for their business (as compared with those who may be considering entering institutional markets).

Meeting the needs of an institutional market—with its demand for large volumes and processed goods—was the most frequently mentioned challenge that vendors face in relating with the UM. Communicating with Dining Services can also be somewhat challenging (e.g., around ordering, understanding who to speak with about new products). As the relationship between a given vendor and Dining Services matures over time, however, communication problems have generally been overcome. A few vendors also mentioned that the contract UM has with its prime vendor can make it difficult for them to be price competitive and still make a profit. Although vendors probably face competition when selling into most markets, some said that the state-mandated bidding process, which requires that the lowest bid be taken, makes it difficult for them to compete with lower quality products because it places too much emphasis on price.

Distribution of goods in a state as vast as Montana emerged as an interesting and complex issue in this study. As mentioned above, there

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**"W**henever we've had a glitch or a problem, we get together; we work it out. We figure out what's gonna be best and get people talking. Together, we've been able to get through all the little obstacles that have been thrown at us."  
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### Vendors' Perspectives on Challenges with Farm to College

- Meeting the needs of an institutional market (e.g., large volumes, processing products, packaging).
- Communicating effectively with the institution.
- Understanding the institution's purchasing system.
- Competition from other businesses, especially the prime vendor.
- Transporting and delivering goods efficiently.

are three categories of vendors selling Farm to College products: those who sell direct, those who sell through a distributor, and those who are a distributor. In the phone survey, 12 of the 14 vendors who do not sell through a distributor thought doing so would make it more difficult for them to sell to the UM, while two thought it would make no difference. Of the five vendors already selling through a distributor, two felt that this makes it easier for them, while two thought it actually makes it more difficult for their business.

These results suggest that most vendors do not think that selling through a distributor would make it easier for them to deliver their products to UM. By contrast, some vendors we spoke with in-depth (which tended to be larger businesses) have gained efficiencies by selling through a distributor. Also, Dining Services has expressed a desire to have SYSCO, its prime vendor, carry more Farm to College products to simplify ordering and delivery. In some cases, Dining Services has helped connect local vendors with SYSCO, which has reportedly been beneficial for all parties. For some vendors, however, this may not be a realistic or even desirable goal. They prefer to deliver directly because it is more personal for them or they are located near Missoula, while others may not produce sufficient volume to sell to a large distributor. As Farm to College expands and as fuel costs rise, it will be worthwhile to further explore the role of distributors in supplying local food to Montana's public institutions.

Vendors offered their perspectives on ways to improve Farm to College, as well as specific policy and project ideas. Their ideas generally paralleled their observations about both the benefits and challenges discussed above (see sidebar). We also asked all vendors about two specific proposals:

- **Electronic database.** According to our phone survey with vendors, 65% think that an electronic database that links Montana's food and agricultural businesses with buyers at public institutions would be a useful tool for them;

21% did not think it would be helpful to their business. Five of the eight in-depth interviewees also thought this tool would be useful.

- **Preference for Montana products.** We asked all of the vendors if they thought that public institutions should give a preference to Montana businesses as a matter of public policy.<sup>13</sup> The vast majority felt that there should be a preference for Montana businesses, with 74% of phone survey respondents and more than half of the in-depth interviewees agreeing with this idea. Some vendors stressed, however, that quality of product should also be a factor in purchasing decisions, not simply the fact that vendors are from Montana.

### Recommendations from Vendors for Dining Services

- Purchase more local products.
- Increase student involvement.
- Expand promotion of the program and its vendors.
- Improve communication.
- Ensure the stability of Farm to College as a future market.
- Encourage other institutions to set up similar programs.

### Not Going the Distance

In today's global food system, what most North Americans eat travels hundreds or even thousands of miles from field to table. Although the global food system provides certain benefits, a growing number of observers argue that the system has become far too dependent on fossil fuels, citing concerns about the security of energy supplies and climate change. One analyst simply maintains we are "eating oil."<sup>14</sup>

Accordingly, one goal of programs like Farm to College and other local food initiatives is to reduce food miles, a term that refers to the distance between the place where food is grown and where it is ultimately consumed. Our research focused on the basic ingredients in a hamburger and French fries meal served at the UM because these are produced and processed in Montana. In FY 2005, the following ingredients were among those sourced through Farm to College:

- The hamburger buns came from Wheat Montana, traveling east from



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- Encourage other institutions to set up similar programs.

### Not Going the Distance

In today's global food system, what most North Americans eat travels hundreds or even thousands of miles from field to table. Although the global food system provides certain benefits, a growing number of observers argue that the system has become far too dependent on fossil fuels, citing concerns about the security of energy supplies and climate change. One analyst simply maintains we are "eating oil."<sup>14</sup>

Accordingly, one goal of programs like Farm to College and other local food initiatives is to reduce food miles, a term that refers to the distance between the place where food is grown and where it is ultimately consumed. Our research focused on the basic ingredients in a hamburger and French fries meal served at the UM because these are produced and processed in Montana. In FY 2005, the following ingredients were among those sourced through Farm to College:

- The hamburger buns came from Wheat Montana, traveling east from

Three Forks to SYSCO's warehouse in Billings, and back west to Missoula.

- The beef patties came from Montana Natural Beef, traveling from the slaughter facility in Ronan to Missoula for processing.
- The French fries came from Bausch Potatoes, traveling from Whitehall to the UM.
- The safflower cooking oil came from Montola in Culbertson, carried by SYSCO through Billings on its way to the UM.

We gathered data on a year's supply of these ingredients used by Dining Services, including the amounts and weights of purchases, the number of deliveries, and the types of trucks and fuel used to transport them from points of processing to the UM. SYSCO provided the same information on where these products would have been sourced conventionally for comparison.

Our analysis showed that a year's supply of the conventionally-sourced products would have traveled an estimated 2.8 times further than they did when purchased through Farm to College (393,930 vs. 141,252 miles). The conventionally-sourced ingredients would have used 43,000 gallons more fuel and emitted 2.9 times the amount of CO<sub>2</sub> in a year (see bar graph).

Divorcing ourselves from the global food system is neither likely nor desirable. What is clear from the analysis here, however, is that we can have a tremendous impact on reducing the amount of fuel used and pollution generated when we eat closer to home.

## Conclusions and Recommendations

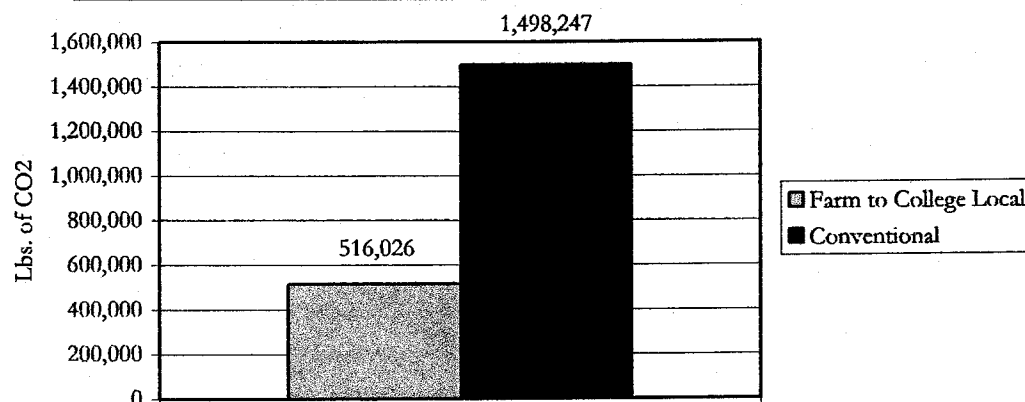
Although still in its infancy, the UM's Farm to College Program has already kept nearly a million dollars in our state, developed systems for working with local vendors (often filling holes in Montana's food supply chain), and spared the atmosphere millions of pounds of CO<sub>2</sub>. In the spirit of continuing this progress and improving the program, our research team came up with several recommendations based on the study's findings. The full report discusses each recommendation in greater detail:

1. Ensure adequate communication between participants—Dining Services, vendors, distributors, and students.
2. Increase education about Farm to College on campus.
3. Focus the Farm to College Program on Montana only, rather than incorporating the larger region to reduce data tracking errors (see note 7 below), and preserve the identity of the program as Montana-based.
4. Create a values-based pledge of understanding signed by Dining Services and vendors to promote transparency, trust, and communication among the partners.
5. Continue to cultivate direct relationships with farm- and ranch-based businesses. While SYSCO's pallet yields certain efficiencies, valuable relationships and direct communication, which have been cornerstones to Farm to College's successes, may disappear.

**W**hy put  
all that  
fuel into  
something that's  
grown right here?"  
— Montana Rancher



**Estimated Total CO<sub>2</sub> Emissions for a Year's (FY '05) Supply of Ingredients in Hamburger and French Fries Meals**



6. Further reduce the transportation-related impacts of all food purchases.

Beyond the University, Farm to College serves as a porthole to understanding the food supply chain in Montana. By tracing the chain associated with Farm to College, we have highlighted many of the links between producers, processors, distributors, and consumers. In some places the chain's links are strong; in others it is weak. Following food products from the field to the student dining hall thus illustrates key needs, questions, and policy changes that have to be addressed if Montana is to develop a secure and vibrant local food system. The following recommendations suggest ways Montana's public policies and private sector initiatives might address some of these weak links and improve the ability of

our public institutions to reap the benefits of Montana's leading industry:

1. Develop new markets and similar programs at other public institutions.
2. Expand the capacity of Montana's food production and processing sectors to effectively meet the needs of institutional markets.
3. Amend the state's procurement law to allow flexibility for public institutions that want to purchase Montana-produced food.
4. Create an electronic database to help connect Montana's food and agricultural businesses with buyers at public institutions.
5. Conduct additional research on the role of distributors in local food supply chains.

### Learning More

- To learn how you might become a Farm to College vendor, start by going to the University website: [www.umt.edu/uds](http://www.umt.edu/uds)
- To get more information on the study, contact Neva Hassanein, Associate Professor, UM Environmental Studies, 406-243-6271 or email [neva.hassanein@umontana.edu](mailto:neva.hassanein@umontana.edu)
- To obtain a copy of the final report, contact Crissie McMullan 406-531-5162 or email [crissienc@yahoo.com](mailto:crissienc@yahoo.com) or visit [www.growmontana.ncat.org](http://www.growmontana.ncat.org)



The University of Montana's Environmental Studies Program partnered with Grow Montana in this research endeavor. A coalition of groups dedicated to helping Montana producers meet more of our state's food needs, Grow Montana identified the research questions focused on here and will use the results to promote community-based agricultural economic development. Grow Montana is a project of the Butte-based National Center for Appropriate Technology.

### Endnotes

1. The UM graduate students who conducted this research during spring 2006 and authored chapters in the final report include: Ariel Bleth, Jacob Cowgill, Katherine Dayton, Paul Hubbard, Scott Kennedy, Jason Mandala, Beth Neely, Hillary Schwei, Kimberly Spielman, and Sarah Stokes. Neva Hassanein, Associate Professor, UM Environmental Studies Program, guided the research effort.
2. The research team gratefully acknowledges the financial support of the W.K. Kellogg Foundation and the Montana Department of Agriculture, which made this research possible. We are also indebted to the University Dining Services' staff and the many vendors and consumers who participated in the study.
3. Burros, Marian. 2005. "Fresh gets invited to the cool table." *The New York Times*. Retrieved Aug. 24, 2005 from: [www.nytimes.com/2005/08/24/dining/24school.html](http://www.nytimes.com/2005/08/24/dining/24school.html)
4. Joshi, Anupama, Marion Kalb, and Moira Beery. 2006. *Going Local: Paths to Success for Farm to School Programs*. Los Angeles: Occidental College and the Community Food Security Coalition.
5. LoParco, Mark and Meredith Printz. 2006. "The UM Farm to College Program: Promoting local food systems and economic development." Presentation to Tracing the Chain research team, January 31, Missoula, Montana.
6. The region includes Idaho, Washington, Oregon, Wyoming, North Dakota, and South Dakota. This research project focused on Montana.
7. The dollar amounts are based on data provided by Dining Services in Jan. 2006. During the course of this research, we identified several data errors, principally with respect to the regionally-sourced products (i.e., distributors no longer sourced them from the defined region). Dining Services does all its own tracking of these items, and the research team has pointed out the errors.
8. A dot survey gathers information from a large number of people in a short period of time. We crafted four questions, each with a set of response options, and presented them on large sheets outside the main entrance to the dining hall during a busy, two-hour period. Approximately 76% of those we asked to participate did so. See the full report for more about this method.
9. Four of the 45 vendors sell through a distributor rather than directly, although we did not have a comprehensive list of all of this type. Another four are distributors.
10. Of those vendors we asked to participate, 89% agreed (i.e., the response rate). The nine vendors who sold less than \$250 to the UM in FY 2005 were not included in the study.
11. Since this research was conducted, Bausch no longer supplies the UM with French fries, although the company continues to supply many potato products to the university. Despite considerable effort, the Dining Services had trouble with the fresh-cut fries, which they found did not hold up as well under heat lamps as frozen fries do after cooking.
12. Since conclusion of this research, Montana Natural Beef has converted from a wholesale distribution company to one that is web-based retail; thus, they no longer do business with the UM. To be profitable in the wholesale market the company needed to double in size, but they did not have the infrastructure to make the leap. The UM now gets beef from Montana Range Brand Meats.
13. Since the conclusion of the study, Grow Montana has proposed a bill in the 2007 Montana State Legislature (SB 328) that would provide greater flexibility for public institutions wanting to develop farm to cafeteria programs.
14. Manning, Richard. 2004. "The oil we eat." *Harper's Magazine*. February. Retrieved Aug. 26, 2006 at: [www.harpers.org/TheOilWeEat.html](http://www.harpers.org/TheOilWeEat.html)

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